



WRIST STRENGTHENING AND PAIN REDUCTION IN HIP-HOP DANCERS

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Background

Breaking, more commonly known as breakdancing is a growing dance form incorporating elements of gymnastics, martial arts and other dance techniques. Since the origination of this dance in the 1970's little scientific study has been conducted investigating injuries to the 'breaking' dance form.

Objective

One of the most common injury sites in dancers is the wrist due to the impact and weight exhibited on the joint. The goal of this study was to investigate a wrist strengthening intervention in the hopes of decreasing pain, and increasing strength and range of motion to help in injury recovery and future injury prevention.

Method

Fourteen participants were recruited to investigate the effectiveness of the intervention measuring pain, wrist strength and range of motion. Pain was measured using the Disabilities of Arm, Shoulder and Hand (DASH) questionnaire. Wrist strength and range of motion was measured using the Biodex isokinetic dynamometer. Pre-measurements were made at the beginning and post-measurements were measured 8 weeks following their first measurement. During this period the experimental group was asked to perform a wrist strengthening intervention.

Results

There was no significant difference between the control and experimental group that performed the intervention ($P > 0.05$). However, significant differences were identified among all participants, showing decreased wrist pain and increased wrist flexion.

Conclusion

The wrist intervention provided no statistically significant improvement in pain, strength or range of motion. Further investigation is needed to understand what caused similar results in both groups as well as interventions that can target enhanced healing and prevent future injuries.

